



Department of  
Environmental Protection  
Bureau of Land & Water Quality    Sept. 2000

**O&M Newsletter**

A monthly newsletter for wastewater discharge licensees, treatment facility operators, and associated persons

## **EPA DMR QA Study #20 Update**

As indicated in previous O & M Newsletters, study updates will appear in the news when study deadlines are approaching.

Most participants should have sent their **chemistry results report packet** to their NIST provider lab **by the report date set by that provider** before now. The default date set by EPA in case the provider did not set a more prompt results report date was to have all results report packets into provider labs by September 15, 2000. These dates are to insure that all result reports are in before any sample true values are released.

The deadline for permittees to send **wet test results to NERL is September 15, 2000**

**Copies of the above packets are also to be sent to the state coordinator.** See the original study announcement for the addresses and for detailed instructions on preparing results report packets.

The next step is that the Provider labs and NERL send evaluation/reports to the permittee, the State/Regional Coordinator, and to US EPA headquarters. These are your scores.

This is scheduled to occur on or about December 18, 2000.

Good luck on your grade and thanks for your patience in working through the difficulties inherent in a new type of study. We will all be more familiar with the procedures next year.

Please call me at 287-7659 if you have had some difficulty with the reporting steps outlined above.

*David Dodge*

## **For Practice**

1. What is the sludge concentration at which pumping becomes difficult?
  - a. 10%
  - b. 5%
  - c. 2%
  - d. 1%
2. The common parameter mg/L (milligrams per liter) is the same as
  - a. Grains/Gallon
  - b. parts per million (p.p.m.)
  - c. ounces per pound
  - d. grams per cubic foot
3. Colloidal particles are
  - a. Particles that settle very rapidly.
  - b. Particles that readily dissolve.
  - c. Particles that settle after an hour.
  - d. Particles that do not settle readily.

4. An operator doses the effluent from his plant with 15 mg/l of chlorine to achieve the necessary bacteria kill. If the flow through the plant averages 2.5 MGD, how much chlorine will be used in 30 days?
- a. 9,382.5 pounds
  - b. 5,684.3 pounds
  - c. 2,397.3 pounds
  - d. 4,378.5 pounds

## **UPCOMING TRAINING COURSES**

September 26, 2000 in Old Orchard Beach, ME, Mechanical Seals & Packing Application, Selection & Installation – approved for 4 hours, sponsored by Maine Rural Water Association (207) 729-6569  
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September 27, 2000 in Bangor, ME , Mechanical Seals & Packing Application, Selection & Installation – approved for 4 hours, sponsored by Maine Rural Water Association (207) 729-6569  
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October 4 & 5, 2000 in Presque Isle, ME, North Country Convention – various training approved for up to 12 hours, sponsored by JETCC (207) 767-2649  
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Oct. 3,10,17,24,31 & Nov. 7, 2000 in Scarborough, ME, Stormwater Instructional Module - approved for 6 hours, sponsored by JETCC (207) 767-2649.  
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October 4, 11, 18 & 25, 2000 in Bangor, ME, NPDES Laboratory Class - approved for 16 hours, sponsored by MRWA (207) 729-6569  
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October 4, 2000, in Old Orchard Beach, ME, Hazard Communication Standard

1910.1200 – approved for 3 hours, sponsored by Maine Rural Water Association (207) 729-6569  
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October 11, 2000, in East Vassalboro, ME, Hazard Communication Standard 1910.1200 – approved for 3 hours, sponsored by Maine Rural Water Association (207) 729-6569  
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October 17, 2000 in Bangor, ME, Setting Up a Pump Maintenance Program - approved for 6 hours, sponsored by JETCC (207) 767-2649.  
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October 17, 2000, in Old Orchard Beach, ME, Electric Motors: Design, Installation & Maintenance – approved for 4 hours, sponsored by Maine Rural Water Association (207) 729-6569  
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October 24, 2000 in Augusta, ME, Hands-on Review of BOD/TSS & Settleability - approved for 6 hours, sponsored by JETCC (207) 767-2649.  
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October 25, 2000 in Brewer, ME, Belt Press Cleaning & Maintenance - approved for 6 hours, sponsored by JETCC (207) 767-2649.  
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November 1, 2000 in Portland, ME, Electrical Maintenance & Controls - approved for 6 hours, sponsored by JETCC (207) 767-2649.

November 2, 2000 in Skowhegan, ME, Step by Step Basic Math Review - approved for 6 hours, sponsored by JETCC (207) 767-2649.  
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November 8, 2000 in Kittery, ME, SCADA Systems - approved for 6 hours, sponsored by JETCC (207) 767-2649.  
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November 8, 2000, in East Vassalboro, Electric Motors: Design, Installation &

Maintenance – approved for 4 hours,  
sponsored by Maine Rural Water  
Association (207) 729-6569

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Nov. 15, 16 & 17, 2000 in Westbrook,  
ME, WW Collection Systems w/  
Optional Exam - approved for 13 hours,  
sponsored by JETCC (207) 767-2649.

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November 28, 2000 in Augusta, ME,  
High Flow Management - approved for 6  
hours, sponsored by JETCC (207) 767-  
2649.

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December 5, 2000 Ellsworth, ME,  
Polymer Sealant Repair & Preventive  
Maintenance Systems Applications in  
WWTF's & Pump Stations - approved  
for 6 hours, sponsored by JETCC (207)  
767-2649.

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December 7, 2000 Augusta, ME,  
Oxidation Reduction Potential (ORP) -  
approved for 6 hours, sponsored by  
JETCC (207) 767-2649.

December 12, 2000 Scarborough  
Laboratory Quality Control & Quality  
Assurance - approved for 6 hours,  
sponsored by JETCC (207) 767-2649.

## **November Certification Exam Reminder**

The next Operator Certification Exam  
will be given on Wednesday, November  
15, 1997 in the usual locations of  
Portland, Bangor and Presque Isle. If  
you want to take the November Exam,  
make sure you get your application form  
or re-test request form to us by  
**September 30, 2000.** And, please, come

prepared for the test. We really would  
like to see the best pass/fail ratio ever!

## **Answers to *For Practice*:**

1. a. It becomes very difficult to pump  
sludge, even using positive  
displacement pumps, when the  
concentration reached 10%.
2. b. 1 mg (milligram) is 1/1000 of a  
gram. 1 liter of water has, by  
definition, a mass of 1000 grams.  
1000 grams equals 1,000,000  
milligrams. Thus, 1 milligram is  
1/1,000,000 of a liter so 1 mg/L = 1  
part per million
3. d. Colloidal particles are almost the  
same density as water and,  
therefore, settle very, very  
slowly.
4. a. Pounds = dosage(in mg/L) x Flow  
(in MGD) x 8.34 lbs/gal x days  
Pounds = 15 mg/l x 2.5  
MGD x 8.34 lbs/gal x 30 days =  
9,382.5 pounds

## **NEA Project**

The DEP has contracted with Northern  
Ecological Associates, Inc. (NEA) to  
finish the job that began two years ago to  
put the location of outfalls from major  
and minor treatment plants and  
combined sewer overflows (CSOs) into  
the Department's GIS system. Staff  
from NEA will be contacting plant and  
CSO personnel to arrange appointments  
to visit sites this fall. If you have any  
questions about GIS, call John Lynam of  
the DEP at 287-8426.

***Steve McLaughlin***